

Docket: 3816.10
June 16, 2004 (12:48pm)

Amendments to the Specification

Paragraph at page 9, lines 16-24:

In one embodiment, the liquid SOG precursor or the slurry of SOG and silicon powder is applied prior to assembly to one or both of the parts to be joined to form, as illustrated in the cross-sectional view of FIG. 5, an adhesive region 40 between the assembled parts. After assembly, an alignment jig [jib] aligns the tower to the tolerances of about 25 to 50 μ m required for wafer support towers. After the tower has been aligned, the tower and jig are moved to an annealing furnace to cure the SOG in the adhesive region 40 at temperatures of up to about 1300°C. Other adhesives and curing processes may be substituted if the adhesive is properly sealed by the plasma sprayed silicon. Alternatively, the tower is aligned to a jig inside the cooled furnace, and thereafter the furnace is raised to the required annealing temperature.

Amendments to the Claims

1. (Original) A method of joining two silicon parts, comprising plasma spraying silicon across a seam separating said two silicon parts to form a coating on adjacent surface areas of said two silicon parts.
2. (Original) The method of Claim 1, wherein the parts are subjected to atmospheric pressure during said plasma spraying.
3. (Original) The method of Claim 1, wherein portions of the parts adjacent the seam are held at a temperature of no more than 500°C.
4. (Original) The method of Claim 3, wherein said temperature is no more than 200°C.